

Notice of Allowability

Application No.

10/727,938

Examiner

Robert Shiao

Applicant(s)

MANZER, LEO ERNEST

Art Unit

1626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to responses filed on 11/03, 2004.
2. ☒ The allowed claim(s) is/are 2, 4-5, 7-13, 16-17, now are 1-12.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

DETAILED ACTION

1. Amendment of claims 2, 4, 7, 10-11, 16-17, and cancellation of claims 1, 3, 6, 14-15, 18-22 in the amendment filed on November 03, 2004, is acknowledged. Claims 2, 4-5, 7-13, and 16-17 are pending in the application.

Responses to Amendment

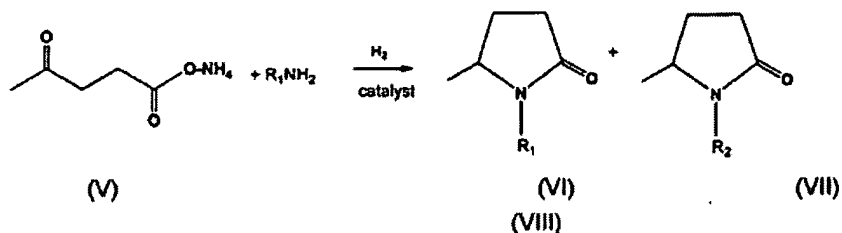
2. Since the limitation of the product of compounds of formula (VII) and (VIII) has been incorporated into claim 2, therefore, rejection of claims 2, 4-5, 7-13, and 16-17 under 35 U.S.C. 112, second paragraph, has been overcome in the amendment filed on November 03, 2004.

EXAMINER'S AMENDMENT

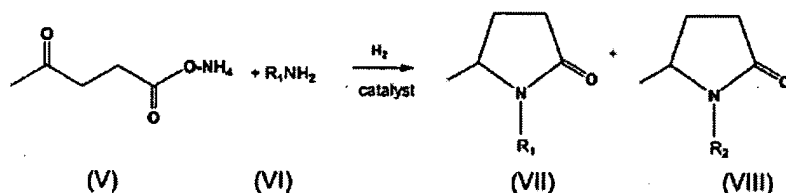
3. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gerald E. Deitch on January 21, 2005. The application has been amended as follows:

In claim 2, line 8, delete



“ ”, and insert



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In claim 11, line 2, after “ratio of Formula”, delete “(II),” and delete “or (X)”

In claim 11, line 2, after “to Formula”, delete “(I),” and delete “or (IX)”

In claim 17, line 2, after “wherein R₁”, delete “and R₃ are”, and insert

--is--

Reasons for Allowance

4. The following is an examiner's statement of reasons for allowance:

Claims 2, 4-5, 7-13, and 16-17 are neither anticipated nor rendered obvious over the art of record, and therefore are allowable. This invention relates to a process for producing 5-methyl-N-aryl-2-pyrrolidone and 5-methyl-N-cycloalkyl-2-pyrrolidone by reductive amination of levulinic acid or its derivatives amine. The closest prior art is Swakon et al. US 3,337,585, disclose process for making pyrrolidones and piperidones. The difference between prior art and instant claims is that the starting material ammonia is used in the prior art, while aryl amine is used in the instant claims. Suggestion for

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modification of above reference to obtain the instant processes, has not been found.

Claims 2, 4-5, 7-13, and 16-17 are allowed.

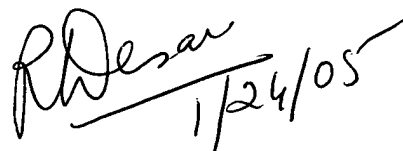
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert Shiao whose telephone number is (571) 272-0707. The examiner can normally be reached on 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph K. McKane can be reached on (571) 272-0699. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Handwritten signature of Rita Desai and the date 1/24/05.

Rita Desai
Primary Patent Examiner
Technology Center 1600
Tel: (571) 272-0684

Handwritten signature of Robert Shiao.

Robert Shiao, Ph.D.
Patent Examiner
Art Unit 1626

January 24, 2005